# REVISIONING Westgate: A District Form Based Code

**Presentation to Edmonds** 

Planning Board April 25, 2012



**Cascade Land Conservancy** 

## **Acknowledgements**

### Team 1 – Fall Quarter Undergrad Class (Fall 2011)

• Elizabeth Abrahamson, Cristina Haworth, Brad Shipley

### Team 2 – Student Internships (2011 & 2012)

- Betsy Jacobson Masters in Urban Planning and Landscape Architect
- Tom Jamieson Masters in Landscape Architecture
- Julie Kreigh PhD in Built Environment
- Jeanine Matthews Masters in Landscape Architecture
- Eric Scharnhorst Masters in Landscape Architecture
- Brad Shipley –B.S Degree in Community, Environment and Planning

### **Faculty:**

- Jill Sterrett, FAICP Urban Design and Planning
- Nancy Rottle, ASLA Landscape Architecture



## **Presentation Agenda**

- 1. Research & Public Process
- 2. Westgate Concept Plan
- 3. Overview of Plan Document
- 4. Questions and Discussion



## Phase One: research & data analysis







### **Conducted**

- An online citizen survey
- Site surveys of land uses & amenities.
- Parking counts
- Walking distance & conditions study
- Maps of study results
- Analysis of user friendliness
- Research on Exemplary Commercial Centers in the PNW
- Coordination with Cascade Land
   Conservancy



## **Phase Two:**

### **Listening Session and Audience Response Surveys**



- Listening sessions
- Audience response survey
- Synthesis of survey results
- Form-based code case studies



## Phase Three: Design Workshop and Draft Plans



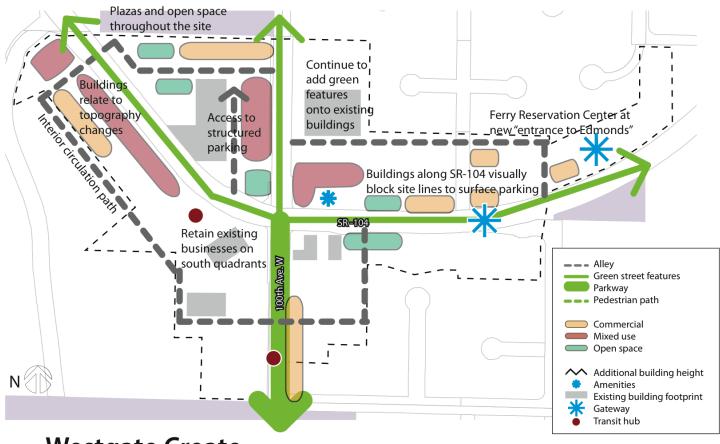


- Public design workshop with local professionals
- Review of what we had heard from the public
- Draft site design: Life, Space, Buildings
- 3 teams Westgate



## **Design Workshop**

### Westgate



wg3: Westgate Create



## **Public Sentiment**

Main Topics	Five Corners	Westgate		
Building Scale	2-3 stories w/ housing	3-4 stories w/ housing		
Public Space	Increasing public space was the most popular recommendation for improvement (all ages). Examples suggested were plazas, sitting space, green space.			
Walking/Biking	Improve walkability by creating safe environment for people of all ages.			
Traffic	Roundabout has general public support. Concerns about increased congestion noted.	No prominent issues with automobile traffic		
Services	Community desires better restaurants, street cafés, and a bakery. Business fronts should be at the sidewalk.			
Amenities	Landscaping on sidewalks, street trees, and use of native plant species			



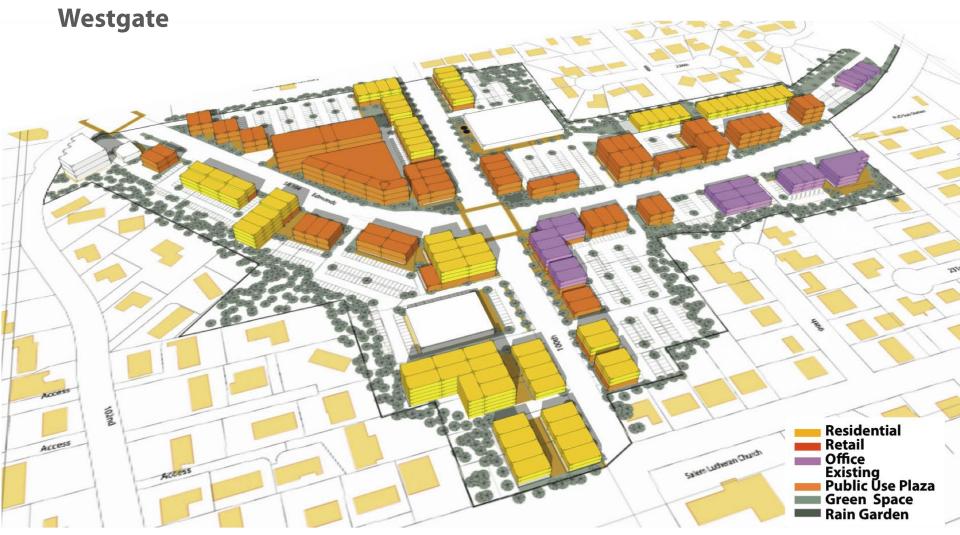
## Phase 4:

### **Refining and Selecting Preferred Alternative - Westgate**





## **Illustrative Building Massing**





## **Illustrative Plan**

### Westgate



## **Comparison of Existing and Potential**

Existing Development (All shown in sq. ft.)		Potential New Development (Sq. ft. and # of dwellings)		
Retail	165,804	Retail (new)	249,700	
		Retail (retained)	54,700	
Office	28,634	Office	167,600	
Services	34,844			
Residential	5,881	B&B	32,400	
		Live Work	24 units	
		Residential	180 units	
Total sq. ft.	235,163	Total sq. ft.* * not including residential	504,400	



## **Contents of the Plan/Form-Based Code**

- 1. Introduction
- 2. The Regulating Framework
- 3. Building Types and Standards
- 4. Civic Investment: Streetscape and Public Space Standards
- Private Investment: Amenity Spaces and Green FeaturesStandards
- 6. Administration and Implementation Standards
- 7. Recommendations



## **Contents of the Plan - Intent and Goals**

- 1. Creating mixed-use walkable, compact development that is economically viable, attractive and community-friendly,
- 2. Improving **connectedness** for pedestrian and bicycle users,
- 3. Prioritizing amenity spaces for informal and organized gatherings,
- 4. Emphasizing green building construction, stormwater infiltration, and a variety of **green features**,
- 5. Establishing a **flexible regulating system** that creates quality public spaces by regulating building placement and form,
- 6. Ensuring **civic and private investments** contribute to increased infrastructure capacity and benefit the surrounding neighborhoods and the community
- 7. Encouraging the development of a variety of **housing choices** available to residents of all economic and age segments.

## **The Regulating Framework**

- 1. Amenity Spaces and Green Feature Types
- 2. Required Building Lines
- 3. Street Types
- 4. Building Types
- 5. Frontage Types





## **Amenity Spaces & Green Feature Types**

- Common Areas: Landscape

   enhancement at intersection;
   possible public park; linkages to
   surrounding areas; setbacks from

   SR 104
- "Amenity Space" (usable plazas, sidewalks, lawns, etc) of 15% per lot, based on analysis of proposed development.
- Street trees and parking lot trees:
   retention of trees on surrounding
   slopes
- Stormwater management through landscape features





## Required Building Lines





Street Type A: State Road 104 - Required Building Line shall be 8' from the right-of-way (see Section 4.2 Streetscape Standards).



 Street Type B: 100th Avenue West - Required Building Line shall be 5' from the right-of-way (see Section 4.2 Streetscape Standards).



3) Street Type C: Internal Circulation Drive - Required Building Line shall be 3" from the edge of the prescribed 9' to 12' edge treatment (yards, sidewalks, landscaping, or swales) lining the drive (see Section 5.4 Streetscape Standards). Required Building Lines for State Road 104 shall be 8' from Right-of-Way

Required Building Lines for 100th Aveneue West shall be 5' from Right-of-Way





## **Streetscape Standards**

#### 100th Avenue West

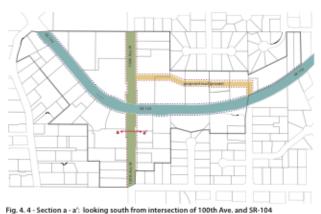
south of SR - 104

#### Proposed Approach

The proposed alterations add bike lanes to an existing cycling route. A bioswale on east side of the street treats stormwater. Additional street trees enhance the pedestrian experience.

Thoroughfare Type:	commercial street with pedestrian enhancements
Movement:	slow
R.O.W Width:	70'
Design Speed:	25 mph
Landscape:	west side - street trees planted 30'on center, east side- bioswale
Traffic Lanes:	10; one each way; 11' center turn lane
Bike Lane:	6' on both sides of street
Parking:	none
Curb to Curb Distance:	43'
Sidewalks:	7'

Table 4.4



serpined Single Index I travel Travel Travel Brown Bro

R.O.W 701

Fig. 4.5

## **Streetscape Standards**

#### State Road 104

#### **Proposed Approach**

The proposed alterations maintain the street's function and designation as a principal arterial while they enhance the street's ecological aspects and improve it as a pedestrian route. Frontage requirements and additional vegetaion will strengthen the character of the street and provide a comfortable sense of enclosure.

Thoroughfare Type:	state highway
Movement:	free
R.O.W Width:	80'
Design Speed:	35 mph
Landscape:	north side - vegetated swale, south side - street trees planted 30' on center
Traffic Lanes: 11', two each way; 11' center turn lane w/ intermittent planted median	
Bike Lane:	none
Parking:	none
Curb to Curb Distance:	55'
Sidewalks:	north side 5 - 8'; south side 5'

Table 4.2

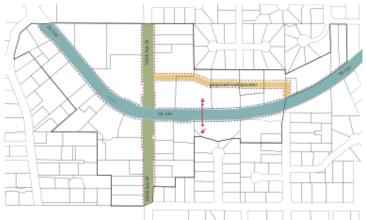
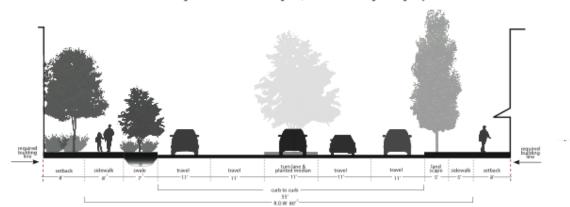


Fig. 4.1 - Section a - a': looking east, in-line with existing bowling alley



## **Streetscape Standards**

#### **Internal Circulation Drive**

#### **Proposed Approach**

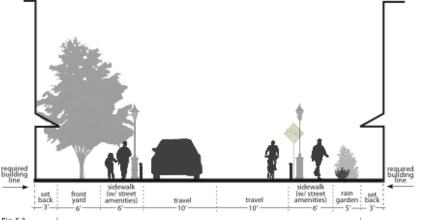
Shared street (or woonerf) concept is intended to provide access to new residential developments, new and existing businesses, and provide pedestrian connectivity as an alternative to SR-104.

Thoroughfare Type:	shared street
Movement:	yield
R.O.W Width:	42'
Design Speed:	10 mph
Landscape:	south side - rain garden fronting businesses
Traffic Lanes:	10; one each way
Bike Lane:	none
Parking:	none
Curb to Curb Distance:	no curbs
Sidewalks:	6'

Table 5.2



Fig. 5.1 - Sections a - a' & b - b'



R.O.W 42'

Fig. 5.2

## **Building Types**

- 1. **Rowhouse** Townhome apartments or condominiums
- **2.** Live Work Townhome apartments or condominiums
- 3. Courtyard Residential Apartment or condominium flats
- **4. Side Court** Office only, Retail Mixed Use with office or residential above, or Community Service Mixed Use with office or residential above
- 5. Commercial Block Retail only, Office only, Retail Mixed Use with office or residential above, or Community Service Mixed Use with office or residential above



## **Residential Building Types**







Rowhouses



**Courtyard Residential** 



Live/Work



## **Commercial Building Types**

### Side Court



### **Commercial Block**



Steep slopes over 8 degrees

## **Height Bonus Locations**

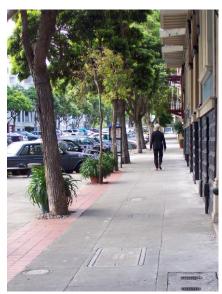


## **Height Bonus Criteria**

Housing	Unit Size (see Section 3.4.1)	nulative	4 Points
Prereq.	Number of units < 900 sq. ft., 10%		Required
Prereq.	No units ≥ 1,600 sq. ft.		Required
Credit 1	Number of units < 900 sq. ft. 20%		1
Credit 2	Number of units 900-1000 sq. ft. 10%		1
Credit 3	Number of units 1001-1200 sq. ft. 10%		1
Credit 4	Number of units 1201-1400 sq. ft. 10%		1
Green Bu	uilding Program		4 Points
Prereq.	Built Green® / LEED® Certified Rating or equivalent		Required
Credit 1	<b>LEED®</b> Silver Rating / <b>Built Green®</b> 4-5 / <b>Evergreen Sustainable Development Standa</b>	ırds	1
Credit 2	<b>LEED®</b> Gold Rating		2
Credit 3	Passive House Standard / LEED® Platinum Rating		3
Credit 4	Living Building®		4
Green Fa	octor		5 Points
Prereq.	Green Factor Score 0.3		Required
Credit 1	Green Factor Score 0.4		2
Credit 2	Green Factor Score 0.5		3
Credit 3	Green Factor Score 0.6		4
Credit 4	<b>Green Factor Score</b> ≥ 0.8 Sustainable Sites Initiative <sup>™</sup> , or equivalent		5
Amenity	Space (see Section 2.3)		4 Points
Prereq.	Percentage of amenity space of lot size 15%		Required
Credit 1	Percentage of amenity space of lot size 20%		2
Credit 2	Percentage of amenity space of lot size 25%		3
Credit 3	Percentage of amenity space of lot size $\geq 30\%$		4
Alternati	ive Transportation Cun	mulative	5 Points
Prereq.	Meet street standards, including; bikeway and pedestrian networks, and vehicle p	arking	Required
Credit 1	Car share parking, minimum 2 parking spots		1
Credit 2	Charging facility for electric cars		2
Credit 3	Indoor bicycle storage and changing facilities		1
Credit 4	Priority parking for sub-compact (Smart Cars™ and motorcycles)		1
One-stor	ry Bonus requires 8 Points Two-story Bonus requires 12 Points		
	Points in 4 categories, including at least one within Green Factor or Amenity Space	e	Required

# **Green Features Standards:**"Westgate Green Factor"

- Based on successful Seattle Green
   Factor for Commercial and Multi-Family Zones
- Flexible system to address ecological and livability functions
- Developer achieves score by implementing green elements; minimum score : .30 of lot size
- **4. Points can be earned for** requirements, e.g. meeting stormwater code; features such as permeable paving, trees, rainwater irrigation in required setbacks and amenity spaces.



street trees



green street edges

## **Green Features Standards:**

Westgate Green Factor

Applicant / landscape professional a) tracks quantities on score sheet and submits with plans;

b) certifies that plan meets or exceeds minimum requirements

#### Points for:

- Soil depth in landscaped areas
- Tree canopy
- Shrubs and ground covers
- Bioretention facilities
- Green roofs
- Permeable paving
- Water features
- Green walls
- Drought tolerant/native plants
- Features visible from public spaces

	sed 1228/10 reen Factor Score Sheet	SEATTLEX	green facto	r
	ect title:	enter sq ft of	8.00.7000	hK.
	Parcel size (enter this value firs	parcel	SCORE	
	Landscape Elements**	Totals from GF works	000112	Total
Α	Landscaped areas (select one of the following for each area)			
1	Landscaped areas with a soil depth of less than 24"	-	on sq ft 0.1	
2	Landscaped areas with a soil depth of 24" or greater		0.6	
3	Bioretention facilities		7 sq ft 1.0	
в	Plantings (credit for plants in landscaped areas from Section A)			
1	Mulch, ground covers, or other plants less than 2' tall at maturity		on the second of	
2	Shrubs or perennials 2'+ at maturity - calculated at 12 sq ft per plant (typically planted no closer than 18" on center)		0.3	
3	Tree canopy for "small trees" or equivalent (canopy spread 8' to 15') - calculated at 75 sq ft per tree	enter number of plants 0	0.3	
4	Tree canopy for "small/medium trees" or equivalent (canopy spread 16' to 20') - calculated at 150 sq ft per tree	enter number of plants 0	0.3	
5	Tree canopy for "medium/large trees" or equivalent (canopy spread of 21' to 25') - calculated at 250 sq ft per tree	enter number of plants 0	0.4	
6	Tree canopy for "large trees" or equivalent (canopy spread of 26' to 30') - calculated at 350 sq ft per tree	enter number of plants 0	0.4	
7	Tree canopy for preservation of large existing trees with trunks 6"+ in diameter - calculated at 20 sq ft per inch diameter	enter inches DBH 0	0.8	
С	Green roofs			
1	Over at least 2" and less than 4" of growth medium		0.4	
2	Over at least 4* of growth medium		o sq ft 0.7	
D	Vegetated walls		0.7	
E	Approved water features		0.7	
F	Permeable paving		<u></u>	
1	Permeable paving over at least 6" and less than 24" of soil or gravel		o sq ft 0.2	
2	Permeable paving over at least 24" of soil or gravel		0.5	
G	Structural soil systems		0.2	
н	Bonuses	sub-total of sq ft =	υ	
1	Drought-tolerant or native plant species		0.1	
2	Landscaped areas where at least 50% of annual irrigation needs are met through the use of harvested rainwater		0.2	
3	Landscaping visible to passersby from adjacent public right of way or public open spaces		0.1	
4	Landscaping in food cultivation		0.1	
ο.	o not count public rights-of-way in parcel size calculation.		Green Factor numerator =	

Green Roofs offer a dramatic functional improvement over conventional roofs. They provide habitat for insects and birds, improve stormwater quality while reducing runoff quantity, and they reduce the heat island effect. Their use in building design can count toward LEED® certification, reduce heating and cooling costs, and almost double the lifespan of the roof. They are becoming more common and can be useful in educating the public about the benefits of green building practices.





#### 2" to 4" of growth medium

Thin profile green roofs have the advantage of reduced structural load on a building, while offering many of the benefits of a thicker profile roof. Even thin profile roofs can capture and retain 60% of the precipitation that falls

Green Factor defines green roofs as any planting which is on top of a structure at least one floor above the level of the at grade entrance. Green roofs with less than a 2" soil profile will be categorized as landscaping areas with less than 24" of soil.

Graphib Legend On Sedum Mat 3-2" Growth Medium BoFilter Fabric ®-Drainage Layer Bu Waterproofing Lay Ella Rossi



Element - 2-4" Green Roof

#### **Functional Benefits**

Reduction of runoff Reduction of heat island Habitat creation Improved insulation

#### **Environmental Considerations**

Petroleum products Requires irrigation

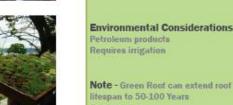
Note - Green Roof can extend roof litespan to 50-100 Years

Factor - 0.4











#### Over 4" of growth medium

Green roofs with a thicker soil profile can support a wider range of plants than a roof with a 2" profile. The increased plant diversity can create a wider range of possible habitats for native insects and birds. Heating and cooling benefits are increased due to increased insulation, and the stormwater are improved. While a wide variety of roof systems are available, proper design, installation and maintenance are crucial to a successful project.

Graphillo Legend Au Plant Material B-4' Growth Medium @oFilter Fabric R-Drainage Laver BoWaterproofing Lav







#### Element - >4" Green Roof **Functional Benefits**

Further runoff reduction Reduction of heat island More diverse habitat

Improved insulation

#### **Environmental Considerations**

Factor - 0.7

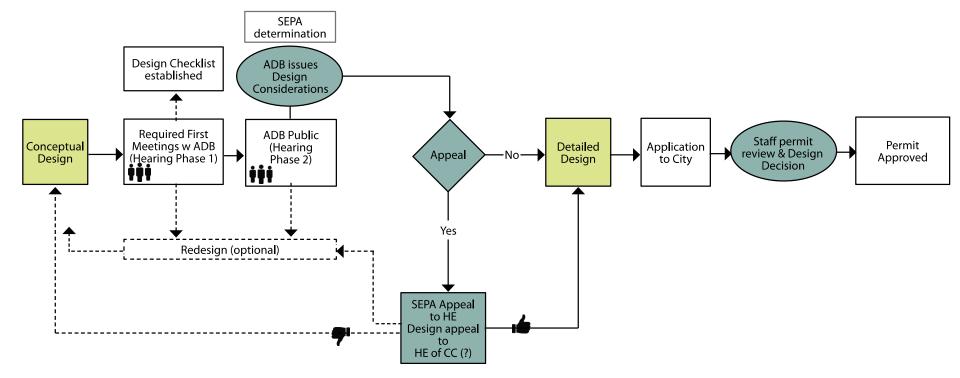
**Green Factor Example** 



4351 15th Ave South, Seattle, WA 98108

## **Administration & Implementation**

Proposed Development	Review Process
1 to 3 Stories	Administrative Review
4 Stories	Administrative Review + Bonus Scoresheet
5 Stories	Administrative Review + Bonus Scoresheet + Design Review



## **Review Schedule**

**Tonight:** PB Presentation & Review

**Next Few Months:** Planning Board to review & refine Plan/FBC

**Fall:** Public meeting(s)

Year end: City Council decision



## **Questions and Discussion**

THANKS FOR PARTICIPATING!

